

A YEAR AMONG THE ORCHIDS: A REMINISCENCE.

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(Read before the Field Naturalists' Club of Victoria, 12th July, 1915.)

THE prosecution of one's nature hobby under natural conditions is always pleasant, and as the scenes are revisited each season to obtain fresh specimens and to conduct newer observations a naturalist cannot be other than reminiscent. In fact, reminiscences "crowd thick and fast," till one is apt to forget the present amidst the memories of the past.

The orchid season of 1914-15 has been somewhat out of the ordinary run of seasons, in that it presented many features of interest, and, owing to the climatic vagaries consequent upon the drought, many unusual developments were noticed. It has been suggested, owing to the drought, that orchids were far less prevalent during the past summer than in the normal seasons. That was not the case, however. For instance, between Ringwood and Bayswater—a famous orchid district—in October, a total of twenty species was collected, with two white varieties, making twenty-two species and varieties in all. Again, at Cheltenham, eleven species were collected, and twelve at Oakleigh. It is noted with great regret, from a naturalist's standpoint, that the rich locality of Ringwood and its environs is fast becoming settled, the soil and aspect having been found most suitable for apple-growing: and it is to be feared that, ere long, our orchid paddocks will be no more, having succumbed to the axe and the plough, and so to provide apples for the world's markets. Hence it will not be long before we shall have to go further afield for wild-flowers.

Thirty years ago Mr. George Coghill exhibited at the Club—in May, 1884—five species of orchids which he had collected at Hawthorn. These included *Pterostylis vittata*,* *P. præcox*, *P. nutans*, *P. concinna*. One would look there in vain for such orchids now, and, indeed, he would be laughed out of court were he to suggest an orchid hunt at Hawthorn nowadays. Apparently the same will be said of Ringwood in a few years' time.

One of the nearest spots to Melbourne where orchids may yet be seen is at Ashburton. Here is now the terminal limit of the coastal flora, which once extended from Sandringham and Cheltenham through Oakleigh and Ashburton to Canterbury. Any remnants have long since gone from Canterbury, and probably Ashburton will soon be civilized, for the paddock in which the orchids were noted has now been fenced, and

*Mr. Coghill informs us this is an error, as he never collected *P. vittata* at Hawthorn. The locality should have been Sandringham. He says it is plentiful at Point Lonsdale. E. E. P. and C. F.

the fence is always the precursor of the floral loss. Here were noted *Pterostylis nutans*, *P. concinna*, *Acianthus exsertus*, and *Corysanthes pruinosa*.

To collect *Pterostylis vittata* a visit would need to be made to Sandringham; and even here this orchid is fast becoming rare. This year, among the coastal tea-tree, where we previously collected dozens of plants, only a fair number were found, and these after a close hunt among the bushes. Also, at Ebden Park, where this orchid and others were formerly abundant, the advance and increase of seaside residences are fast destroying this erstwhile famous collecting ground.

Pterostylis concinna is still exceedingly plentiful under the tea-tree at Sandringham and Beaumaris, and, both last season and this, it has been a charming early winter visitant. *Cyrtostylis reniformis* and *Caladenia Patersoni* are also in evidence along the coast. Here, also, a few plants of *Corysanthes pruinosa* were found; previously, too, these were plentiful along the beach hills. But on the sandy hills near Cheltenham, and in the open scrub beyond Oakleigh, this species is still to be found in abundance. This season one colony was found which must have contained many thousands of individual plants so closely set in an irregular area of about eight yards across as to almost overlap each other, and exclude every other plant. The mate to this species, *Corysanthes unguiculata*, which was first found at Oakleigh by Mr. C. French, jun., in June, 1890, will soon be extinct in its original locality. The paddock where it grows is now used as a pasture for cows, which are eating up and tramping down the clumps of *Melaleuca squarrosa*, which is the natural cover for the orchids. Rabbits, too, have discovered that orchid tubers are edible, and this year it was noted that these rodents were scratching up the young plants of *Pterostylis pedaloglossa*, and eating both plants and tubers. In another instance, a colony of ants had excavated under and completely covered up a growing patch of this orchid. Last year only half a dozen plants of *Corysanthes unguiculata* were found; but this season several dozen were observed. Surely this would lead one to consider that in an unfavourable season the tubers remain dormant in the soil.

Pterostylis pedaloglossa, too, presented an unusual problem. For the last two seasons, although hundreds of plants were noted, only one flower was seen, and that was in 1914. In the same paddock it was previously possible to collect flowers of *Pterostylis nutans* by the thousand; but, now that cows and rabbits have found these plants palatable, this species, while common and yet interesting, is here fast disappearing. Another factor connected with the disappearance of this orchid is the increase in the spread of certain weeds. In one corner of the

tea-tree, a colony of this orchid, which was abundantly present in 1914, was almost smothered in 1915 by the luxuriant growth of the English Dandelion, *Taraxacum officinale*, and the Sorrel, *Rumex acetosella*, the seeds of these introduced weeds having been spread by the agency of stock manure.

In this locality this season a small albino or variegated form of *Pterostylis nutans* was found. The plant had three leaves, and, under cultivation, has since developed a fourth. This interesting break of albinism is not common among the orchids.

In the heath lands last year it was quite impossible to collect a single flowering specimen of *Lyperanthus nigricans*. Frankston, Sandringham, Black Rock, Beaumaris, Cheltenham, and Oakleigh were all searched over, but they refused to yield up even one flower. Thousands of plants were found dead everywhere, and this quite early in September. This was probably owing to the dryness of the winter and the heat of early spring. The check to the flowering of the plant, and the death of the foliage, did not interfere with the life of the tubers. Many of these were dug up, and they appeared quite normal, though rather small. This year the foliage is as plentiful and as vigorous as ever.

Two other species which are usually plentiful were not found by us in the metropolitan area last season, although diligent search was made in their usual localities. These were *Gastrodia sesamoides* and *Orthoceras strictum*. The same localities will be searched again this season to see if they have survived the drought. The former, however, was found at Yering Gorge by Dr. C. S. Sutton in November, and by Mr. C. French, jun., at Korumburra during the first week in December. In the latter case the tubers were exceedingly large. It is strange that this orchid should have been so scarce last year, for its congener, *Dipodium punctatum*, was plentiful in all of its usual haunts at Healesville, Ringwood, Croydon, Bayswater, Tyabb, &c. One plant was noticed at Ringwood 37 inches in height, with fifty-three individual flowers on the spike: a plant was also collected at Black Rock as late as 17th March, and this only had one flower expanded. Thirty years ago *Dipodium punctatum* was very common in the river paddocks at Richmond and Burnley, but here it has long been extinct. These two hot-season orchids are usually credited with being parasitic upon gum-tree and other roots. At Ringwood this season one plant was carefully dug from the soil, and no roots or tree stumps were in close proximity to the tuberous roots. It has recently been ascertained that *Gastrodia elata*, a Japanese species, only flowers when attacked by the root-rot fungus, *Armillaria mellea*, which lives in symbiotic relationship on the orchid tubers. If this be so, it may be found that the same

biological condition is responsible for the flowering of our own local species. This fungus is common in the soils everywhere in the Victorian bush, and it does not favourably develop in hot, dry weather. So it may be suggested, presuming the fungus operates on our own species, that the hot, dry season prevented the fungus developing and growing, and, as a result, the tubers did not receive the force necessary to stimulate flowering.

The genus *Prasophyllum* was also somewhat scarce last year. With the exception of three species which were found abundantly at Healesville, only a single specimen each of *Prasophyllum Archeri*, at Emerald, and *P. despectans*, at Bayswater, were collected. *Prasophyllum fuscum*, *P. brevilabre*, and *P. australe* were growing intermingled at Healesville, and, casually, it would be very easy to confuse the species, except for the dainty fragrance of *P. fuscum*. One fasciated spike of this species was collected, having fifty-one flowers. *Prasophyllum elatum*, which is plentiful enough in most seasons, was not found at all.

A genus which might be expected to suffer considerably, or even to be markedly absent, owing to the dry, hot season, is *Pterostylis*: but that was not the case, for, in all, fourteen species were collected, according to their season, and, with the exception of *P. pedaloglossa*, which has been previously referred to, all were flowering well. *P. parviflora*, which flowers in the autumn, and which might reasonably have been expected to suffer, was well in evidence in several collecting-grounds. It was noticeable of this species that the taller and more robust specimens were found on the stiff, dry, clay soils, while the small plants, frequently with only a single flower, were mostly growing in the humid and peaty soils of the tea-tree area. The queer, hairy-tongued species, *P. barbata*, too, was fairly abundant. The naming of *Pterostylis falcata*, which has been confused with *P. cucullata*: the raising to specific rank of its variety as *P. alpina*; and the placing of *P. Mackibbini* as a synonym of *P. cucullata*, all by Dr. R. S. Rogers, M.A., the well-known Australian orchidologist, has previously been referred to at the Club. Both *P. falcata* and *P. alpina* were collected along the Watts River in October, where they grow fairly profusely.

The three genera which delight in the summer sun, *Thelymitra*, *Diuris*, and *Caladenia*, were all very plentiful, the season apparently not having affected them at all, unless to cause them to blossom profusely. *Diuris alba* flowered beautifully, both naturally and under cultivation, while *D. longifolia* and *D. pedunculata* were very abundant at Ringwood. *D. punctata* is becoming rare within fair range of the metropolis, but one occasionally hears of good numbers of blooms in

distant country localities. Many of the *Thelymitras* were abundant. Ringwood was gay with *T. aristata* and *T. ixioides*, while Frankston and elsewhere were fragrant with dainty *T. antennifera*. With the exception of the beautiful *T. epipactoides*, the genus seems to be as prevalent as ever in the various localities, but this one species is fast becoming very rare. It was not found even after much hunting during the past two seasons. With the exception of *Caladenia filamentosa*, every Victorian species was observed, *C. Cairnsiana* being exceptionally fine. *C. discoidea* is still retained on the Victorian lists, although it is purely a Western Australian species. It is very probable that this species has crept into Victorian records by accident or by error. The long-petalled form of *C. Patersoni* was not very frequent, but the variety known as *C. dilatata* was much more prevalent. On the whole, the *Caladenias* and the *Thelymitras*, with *Glossodia major*, seem to be among the hardiest of our orchids and to resist most the advances of civilization.

One orchid that is fast disappearing from its usual resorts is *Spiranthes australis*. This plant was formerly common, growing in the moist flats along the various upper reaches of the Yarra in the Warburton district. In a few years past it was easily possible to collect over one hundred flower-spikes in one particular paddock; but this year—January—we considered ourselves fortunate in finding only a dozen flower-spikes. The paddocks have all been sown down with pasture grasses, and sheep and cattle have been turned in to feed on the grass, and incidentally on the orchids. Other areas, too, are being drained and planted with fruit trees, so that here, soon, *Spiranthes australis* will cease to exist. It would not have been possible for us to collect even these dozen flower-heads only that they were growing in *Cyperus* tussocks, in very wet and swampy parts of the paddock. Several remains of plants were found, the tops of which had been eaten by the stock. In the tussocks the plants were often three feet in height.

Lyperanthus (Caladenia) suaveolens was missing from its home in Croydon, apple and pear trees having taken its place; but at Bayswater it is still fairly frequent, and, notwithstanding the dry season, some of the spikes were very fine.

An interesting reminiscence is the fact that *Calochilus campestre*, in years gone by, was very prevalent, and was frequently exhibited at the Club, while its mate, *C. Robertsoni*, was considered as uncommon. In 1884 Mr. C. French, sen., writing on our orchids, records *C. campestre* as becoming scarce, while he had never collected *C. Robertsoni*. Nowadays we frequently find *C. Robertsoni*, but very rarely *C. campestre*. Probably the former is the hardier of the two, and so has been less affected by the modern civilizing influences.

Among the less numbered genera several species were collected. *Chiloglottis Gunnii* was very plentiful at Wandin, growing in the dry soils. One plant was found growing in the moss on a low island in the Watts River at Healesville. The two *Acianthus*, *A. caudatus* and *A. exsertus*, are still with us in fair numbers, the latter being the more common. *Cryptostylis longifolia* is also well represented, although at Ringwood and at Oakleigh live stock are beginning to eat it up. Under cultivation, this orchid flowered bountifully this season. Its mate, *C. leptochila*, was fairly abundant at Gembrook, but, while very many plants were noted, not one flower-head was seen. The dry season, again, was possibly responsible for this.

The two species of *Eriochilus*—*E. (Caladenia) fimbriata* and *E. autumnalis*—are yet abundant, and it was pleasant to note how sweetly fragrant *E. autumnalis* was, in the warm, dry weather of April and May. *Microtis porrifolia* was abundant in old creek beds at Ringwood, and elsewhere in moist localities. *M. atrata* was very common at Coldstream. *Glossodia major*, a warm weather and hardy orchid, was this year very variable. At Ringwood, Oakleigh, and at many other places, it was fairly common. In normal seasons, in the State Forest at Chiltern, this lovely and yet common orchid usually carpets the ground in great profusion: but this year a drive through hundreds of acres of the forest revealed only five individual flowers. Probably, as in the case of *Lyperanthus nigricans*, the foliage developed, but shrivelled on account of the dry weather.

And so, out of the ninety-six species recorded for Victoria in the past year, we have observed a total of sixty-two, or nearly two-thirds of all the species. The outstanding feature of our observations is the undoubted fact that, owing to the inevitable spread of cultivation and settlement, the family of orchids, which is so wonderfully interesting, is fast passing away from our midst. Unlike other classes of plants, this one does not readily lend itself to cultivation, nor does it survive for any time on settled lands, and it is thus impressed upon us that, while they are yet with us, we should study them, and so record for future generations tales of the plants which will then, no doubt, be extinct.

VERNACULAR NAMES FOR VICTORIAN PLANTS.—The August number of the *Journal of Agriculture of Victoria* contains a further instalment of the provisional list of vernacular names, comprising the orders from Callitrichiaceæ to Umbelliferæ. This part includes the Myrtaceæ, among which are many beautiful shrubs worthy of garden cultivation, also the different species of eucalypts, for which the selection of suitable vernacular names proved a very difficult task.